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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,210	07/30/2003	Joseph E. Mattingly JR.	AMC.P.US0021	2012
26360	7590	02/21/2006	EXAMINER	
RENNER, KENNER, GREIVE, BOBAK, TAYLOR & WEBER FIRST NATIONAL TOWER FOURTH FLOOR 106 S. MAIN STREET AKRON, OH 44308			COOLEY, CHARLES E	
			ART UNIT	PAPER NUMBER
			1723	

DATE MAILED: 02/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

8

Office Action Summary	Application No.	Applicant(s)	
	10/630,210	MATTINGLY, JOSEPH E.	
	Examiner	Art Unit	
	Charles E. Cooley	1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 22-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21 is/are rejected.
- 7) ☒ Claim(s) 20 is/are objected to.
- 8) ☒ Claim(s) 1-27 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

NON-FINAL OFFICE ACTION

1. This application remains assigned to Technology Center 1700, Art Unit 1723 and the following will apply for this application:

Please direct all written correspondence with the correct application serial number for this application to Art Unit 1723.

Telephone inquiries regarding this application should be directed to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197 or to the Examiner at (571) 272-1139. All official facsimiles should be transmitted to the centralized fax receiving number 571-273-8300.

Election/Restriction Requirement

2. Applicant's election with traverse of Group I, claims 1-21 in the reply filed on 3 JAN 2006 is acknowledged. The traversal is on the ground(s) the withdrawn claims may be subject to rejoinder. This is not found persuasive because there is presently no allowable generic claims that embrace the subject matter of the withdrawn claims and thus rejoinder is not warranted.

The requirement is still deemed proper and is therefore made FINAL.

3. Claims 22-27 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 3 JAN 2006.

Art Unit: 1723

Information Disclosure Statement

4. Note the attached PTO-1449 forms submitted with the Information Disclosure Statements filed 29 AUG 2003 and 10 DEC 2004.

Drawings

5. The replacement sheets of drawings filed on 3 JAN 2006 are approved by the examiner.

Specification

6. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. **Claims 1, 2, 4, 5, 6, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by D'Alterio (US 5,100,240).**

The patent to D'Alterio discloses an element (one or more of members 28, 29) as seen in the Figures below comprising one or more lobes extending from a central

Art Unit: 1723

portion adapted to receive a shaft 22; wherein the one or more lobes has an outer periphery ridge and first and second lateral sidewalls, wherein one of said lateral sidewalls (denoted at 28P - see Fig. 3) of said at least one lobe is concave between said outer periphery ridge and said central portion, wherein the other of said lateral sidewalls 30 on each lobe is convex between said outer periphery ridge and said central portion; the element may comprise one or more of members 28 and/or 29 and thus includes two or three or more lobes as seen in Figs. 6-7; said element is twisted (Fig. 3); the element constituting a block comprising a plurality of elements (multiple sets of members 28 and/or 29), wherein the block includes at least two kneading elements (e.g., 28P, 28P - Fig. 6) wherein one of the lateral sidewalls on at least one lobe is concave between said outer periphery ridge and said central portion; wherein the block comprises N number of kneading elements adjacent to each other (e.g., N number of 28P, 28N - Fig. 6), wherein all the elements have at least one lobe having first and second lateral sidewalls and wherein one of the lateral sidewalls on said at least one lobe is concave between said outer periphery ridge and said central portion; wherein at least the first element (an upstream member 28P) of the block has at least one lobe having first and second lateral sidewalls and wherein one of the lateral sidewalls on said at least one lobe is concave between said outer periphery ridge and said central portion; wherein at least the last element (a downstream member 28P) of the block has at least one lobe having first and second lateral sidewalls and wherein one of the lateral sidewalls on said at least one lobe is concave between said outer periphery ridge and said central portion; wherein at least the first and last elements (an upstream member

Art Unit: 1723

28P and a downstream member 28P) of the block has at least one lobe having first and second lateral sidewalls and wherein one of the lateral sidewalls on said at least one lobe is concave between said outer periphery ridge and said central portion; wherein each element (28, 29) is twisted in the same direction.

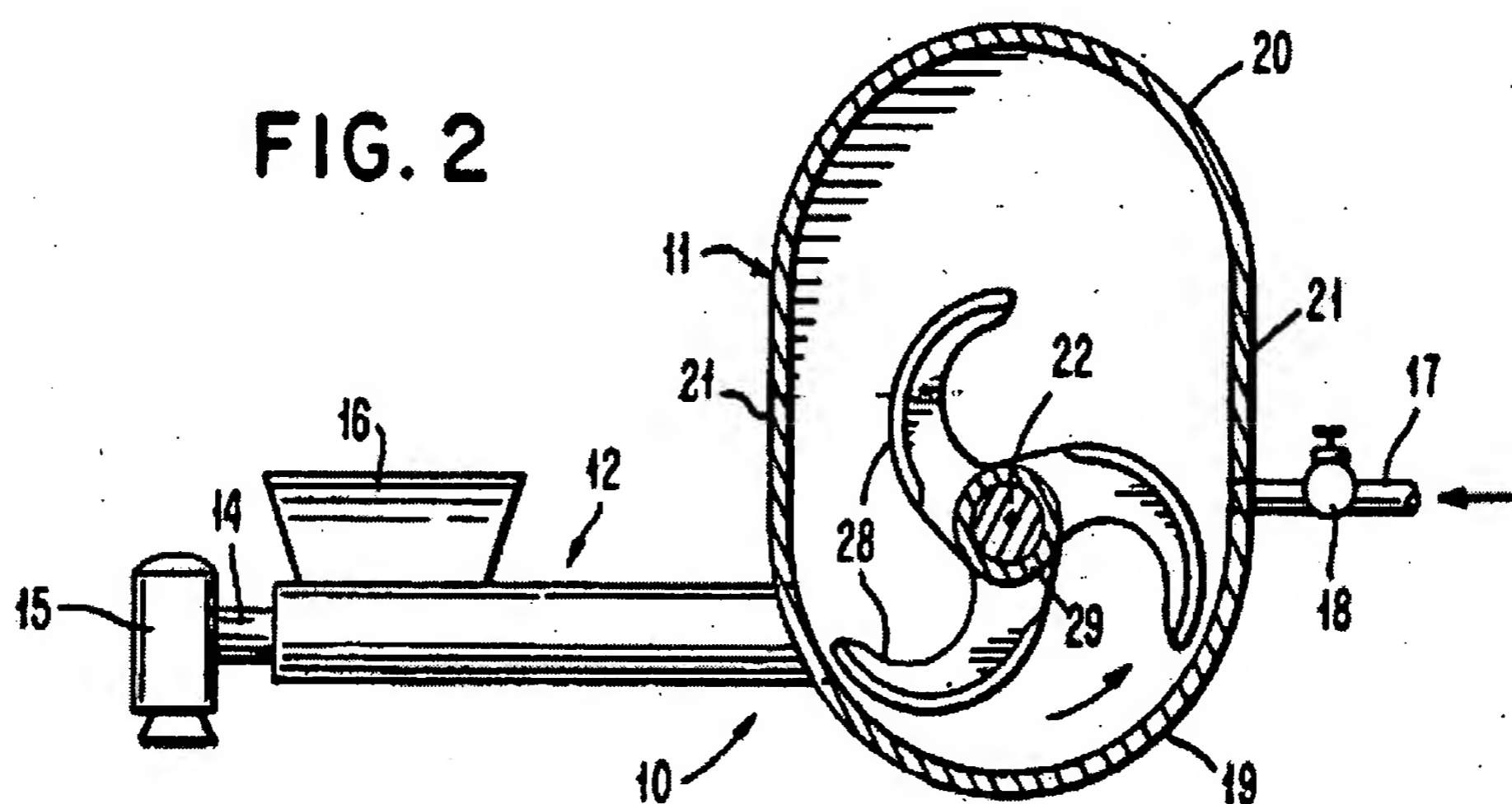


FIG. 3

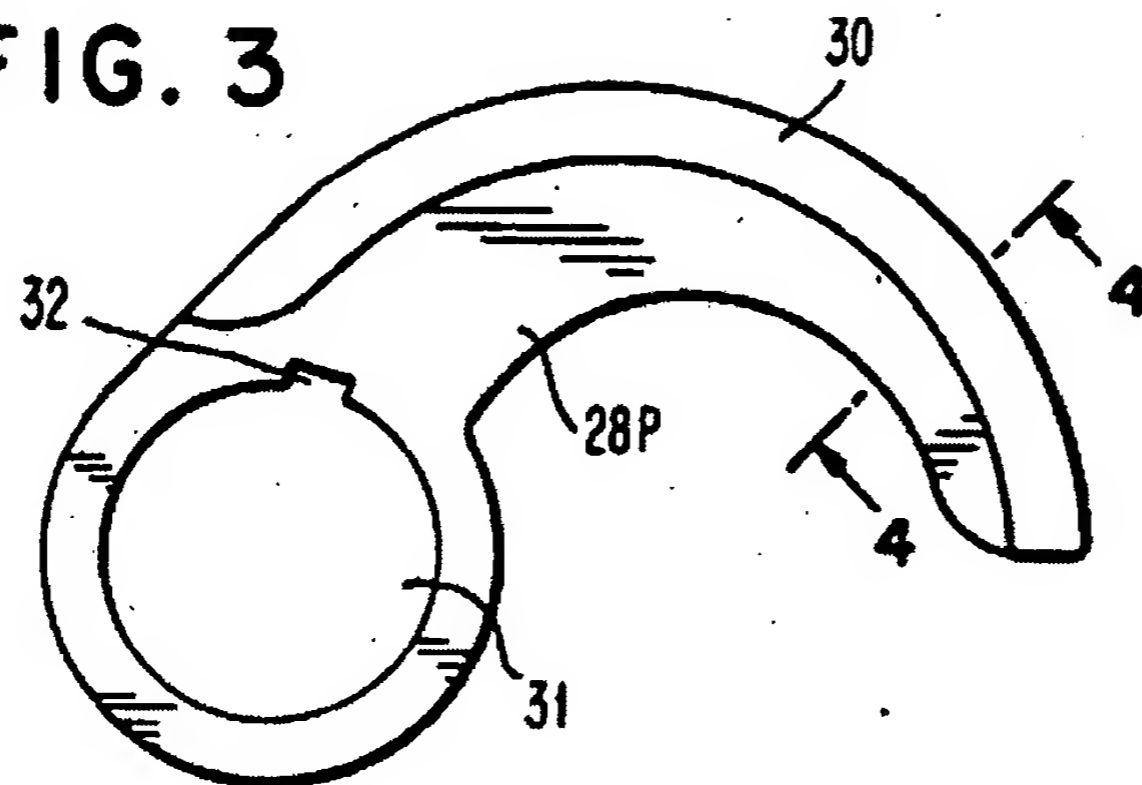


FIG. 6

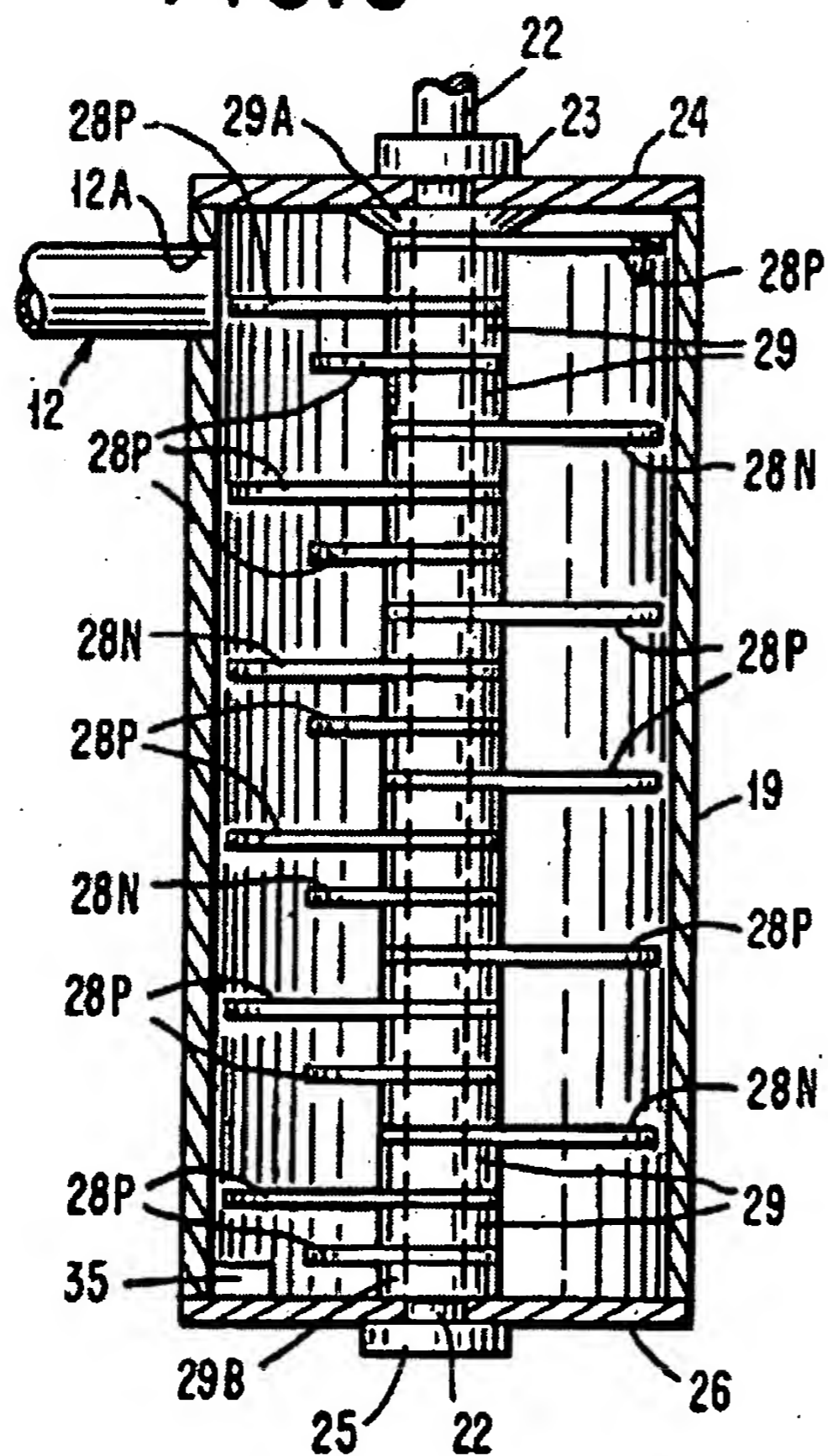


FIG. 7

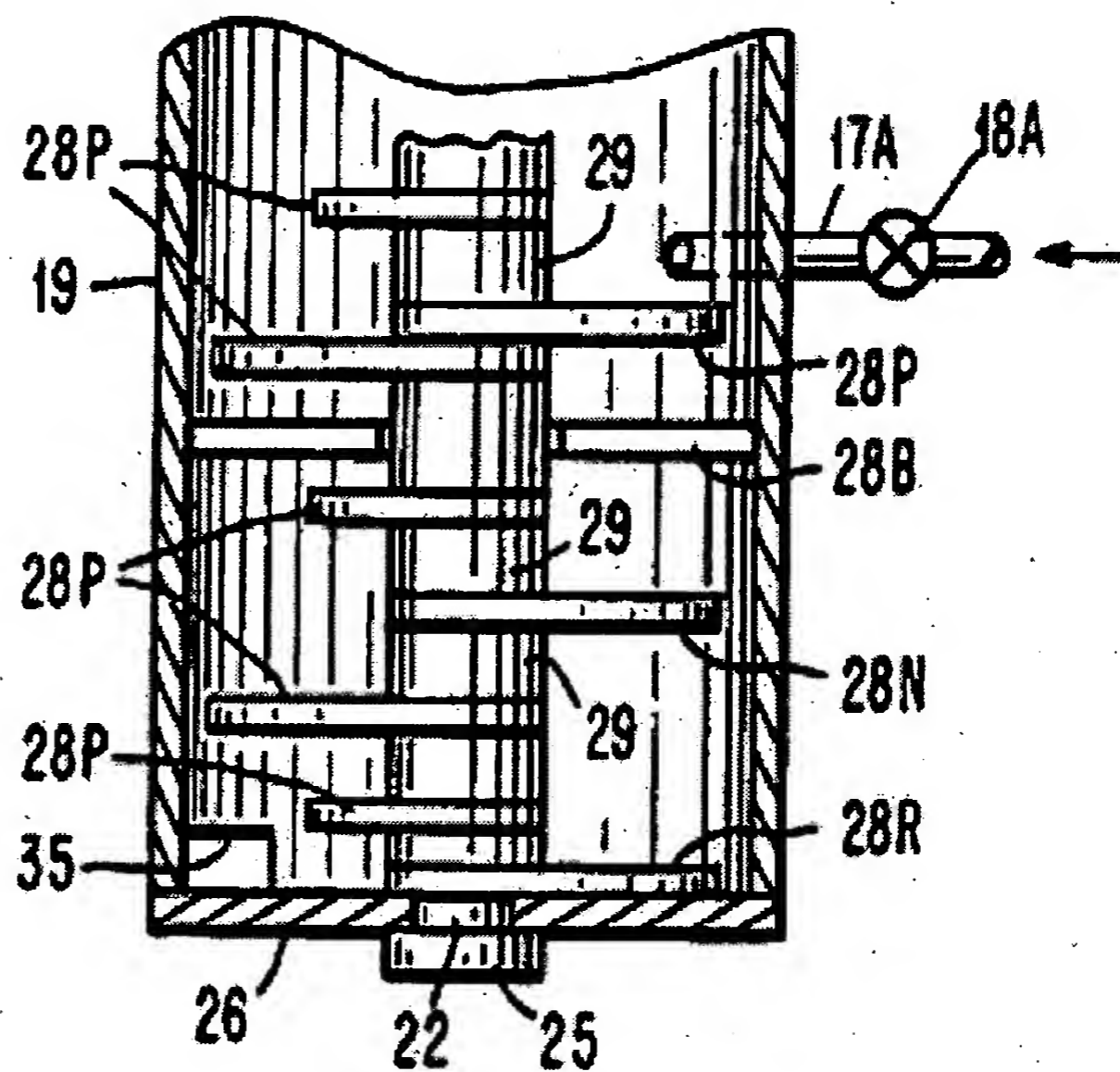
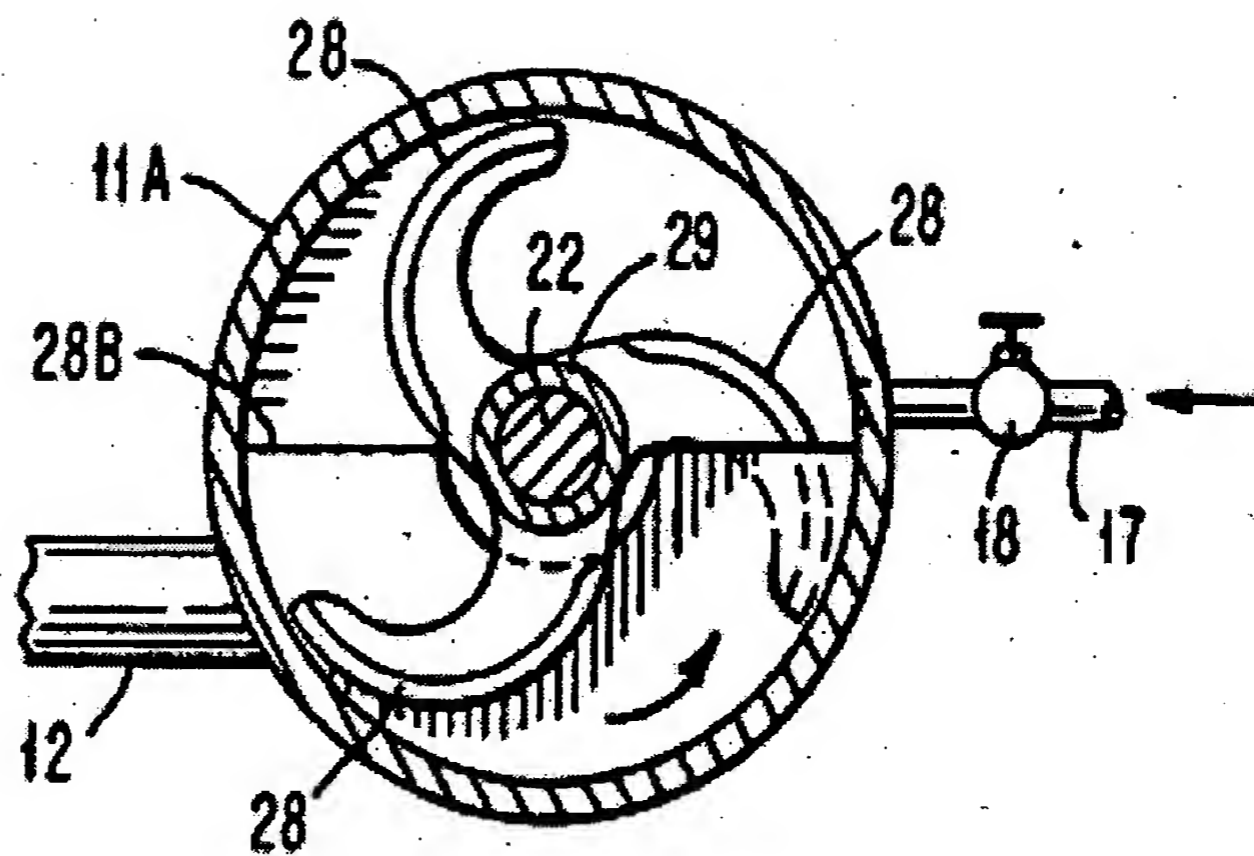


FIG. 8



Art Unit: 1723

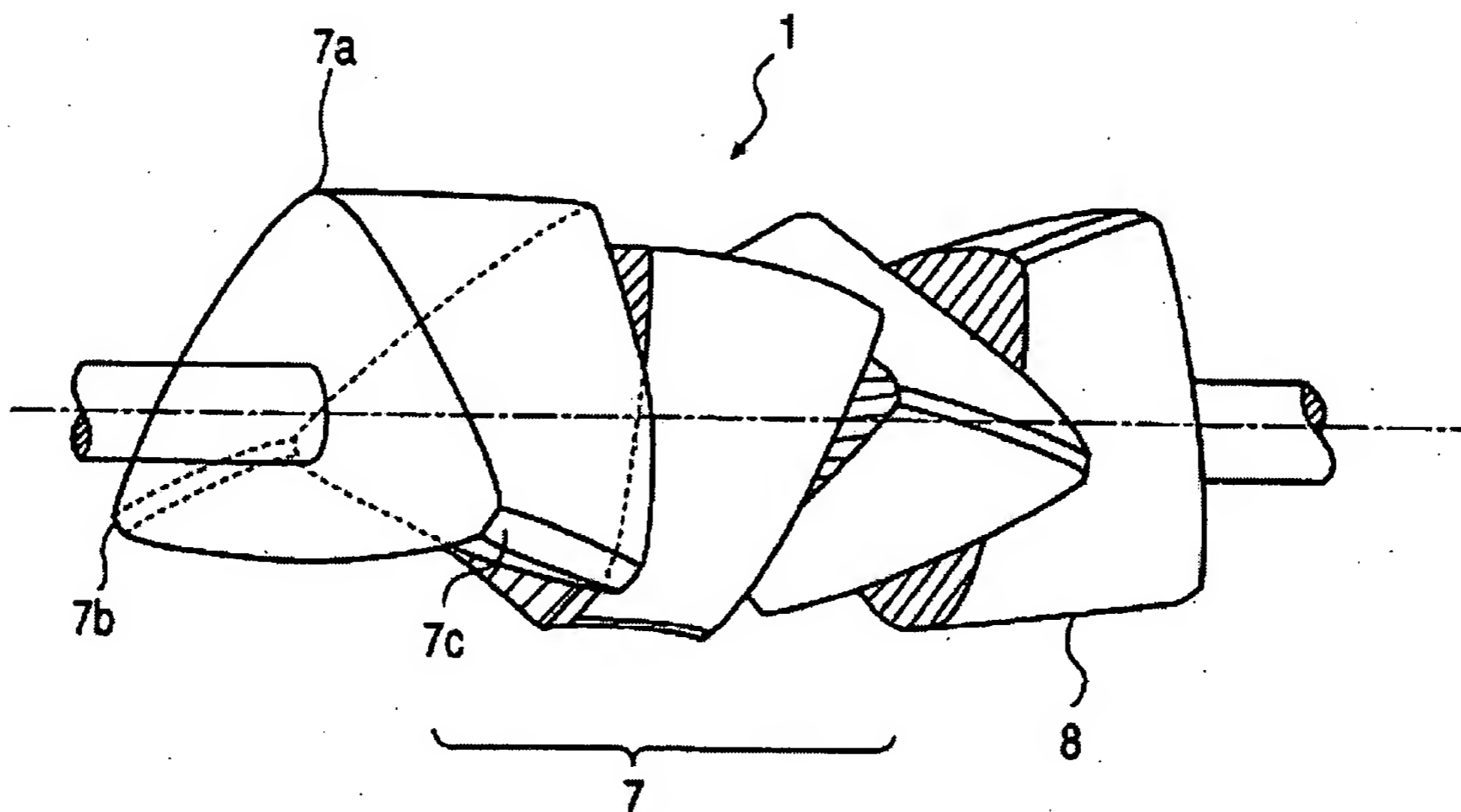
9. Claims 1, 2, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Inoue et al. (US 5,984,516).

The patent to Inoue et al. discloses an element (one or more of members 7) as seen in the Figures below comprising one or more lobes (7a-7c) extending from a central portion adapted to receive a shaft (Fig. 15); wherein the one or more lobes has an outer periphery ridge and first and second lateral sidewalls, wherein one of said lateral sidewalls (proximate D in Fig. 3) of said at least one lobe is concave between said outer periphery ridge and said central portion, wherein the other of said lateral sidewalls on each lobe is convex between said outer periphery ridge and said central portion (Fig. 3); the element may comprise one or more of members 7 and includes two or three or more lobes as seen in Figs. 3 and 15; said element is twisted (Fig. 3); wherein said element has an axial depth greater than the diameter of the shaft receiving bore (Fig. 15); the element constituting a block comprising a plurality of elements (multiple members 7 - Fig. 15), wherein the block includes at least two kneading elements 7, 7 wherein one of the lateral sidewalls on at least one lobe is concave between said outer periphery ridge and said central portion; wherein the block comprises N number of kneading elements 7 adjacent to each other (e.g., N number of 7 - Fig. 15), wherein all the elements have at least one lobe having first and second lateral sidewalls and wherein one of the lateral sidewalls on said at least one lobe is concave between said outer periphery ridge and said central portion; wherein at least the first element (an upstream member 7) of the block has at least one lobe having first and second lateral sidewalls and wherein one of the lateral sidewalls on said at least

Art Unit: 1723

one lobe is concave between said outer periphery ridge and said central portion;
wherein at least the last element (a downstream member 7) of the block has at least
one lobe having first and second lateral sidewalls and wherein one of the lateral
sidewalls on said at least one lobe is concave between said outer periphery ridge and
said central portion; wherein at least the first and last elements (an upstream member 7
and a downstream member 7) of the block has at least one lobe having first and second
lateral sidewalls and wherein one of the lateral sidewalls on said at least one lobe is
concave between said outer periphery ridge and said central portion; wherein each
element 7 is twisted in the same direction (Fig. 15).

FIG.15



10. Claims 1, 3, 4, 5, 9, 11, 12, 13, 15, 16, 17, 18, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Tynan (US 4,556,324).

The patent to Tynan discloses an element (one or more of members 22 or 22') as seen in the Figures below comprising one or more lobes extending from a central portion adapted to receive a shaft 23; wherein the one or more lobes has an outer periphery ridge and first and second lateral sidewalls, wherein one of said lateral

Art Unit: 1723

sidewalls of said at least one lobe is concave between said outer periphery ridge and said central portion (as seen in the Figures); wherein the other of said lateral sidewalls on each lobe is concave between said first outer periphery ridge and said central portion (as seen in the Figures); the element may comprise one or more of members 22 or 22' and includes two or three or more lobes as seen in Figs. 2A and 2B; the element constituting a block comprising a plurality of elements (multiple members 22 or 22'), wherein the block includes at least two kneading elements 22 or 22' wherein one of the lateral sidewalls on at least one lobe is concave between said outer periphery ridge and said central portion; wherein the block comprises N number of kneading elements 22 or 22' adjacent to each other (e.g., N number of 22 or 22' - Fig. 2B), wherein all the elements have at least one lobe having first and second lateral sidewalls and wherein one of the lateral sidewalls on said at least one lobe is concave between said outer periphery ridge and said central portion; wherein at least the first element (an upstream member 22 or 22') of the block has at least one lobe having first and second lateral sidewalls and wherein one of the lateral sidewalls on said at least one lobe is concave between said outer periphery ridge and said central portion; wherein at least the last element (a downstream member 22 or 22') of the block has at least one lobe having first and second lateral sidewalls and wherein one of the lateral sidewalls on said at least one lobe is concave between said outer periphery ridge and said central portion; wherein at least the first and last elements (an upstream member 22 or 22' and a downstream member 22 or 22') of the block has at least one lobe having first and second lateral sidewalls and wherein one of the lateral sidewalls on said at least one

Art Unit: 1723

lobe is concave between said outer periphery ridge and said central portion; wherein the other of said lateral sidewalls on each lobe in the block is concave between said first outer periphery ridge and said central portion (as seen in the Figures).

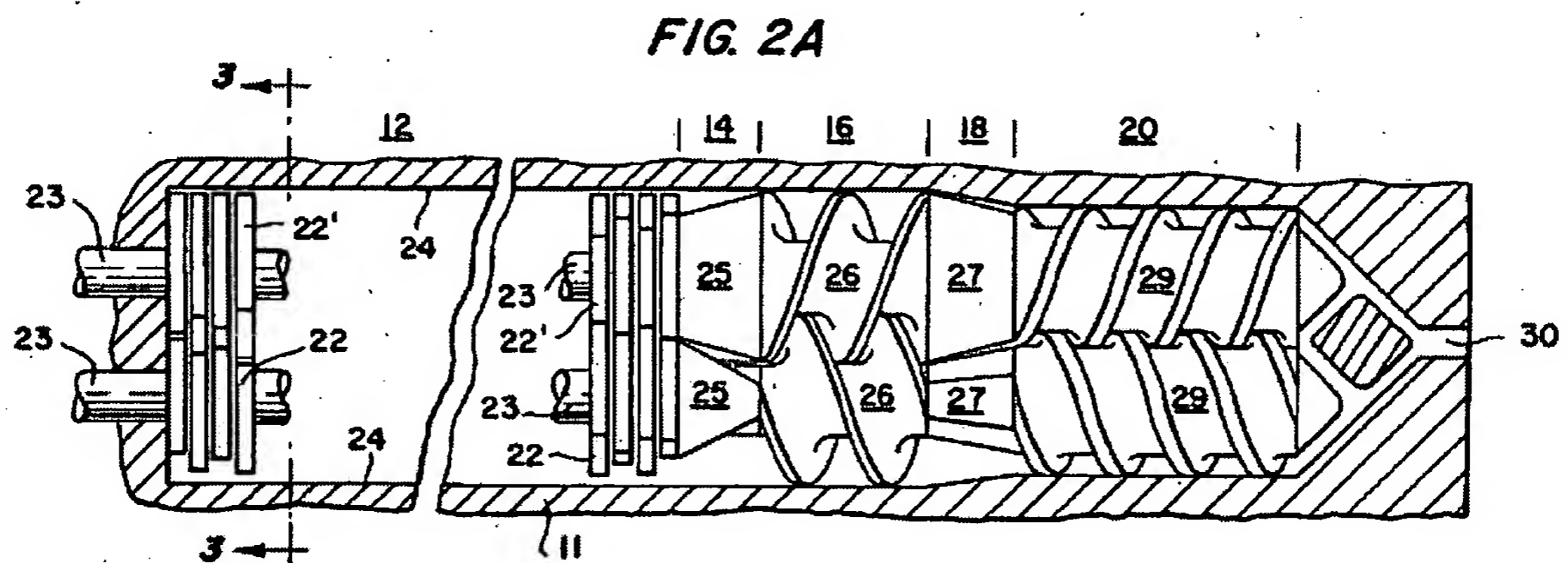


FIG. 2B.

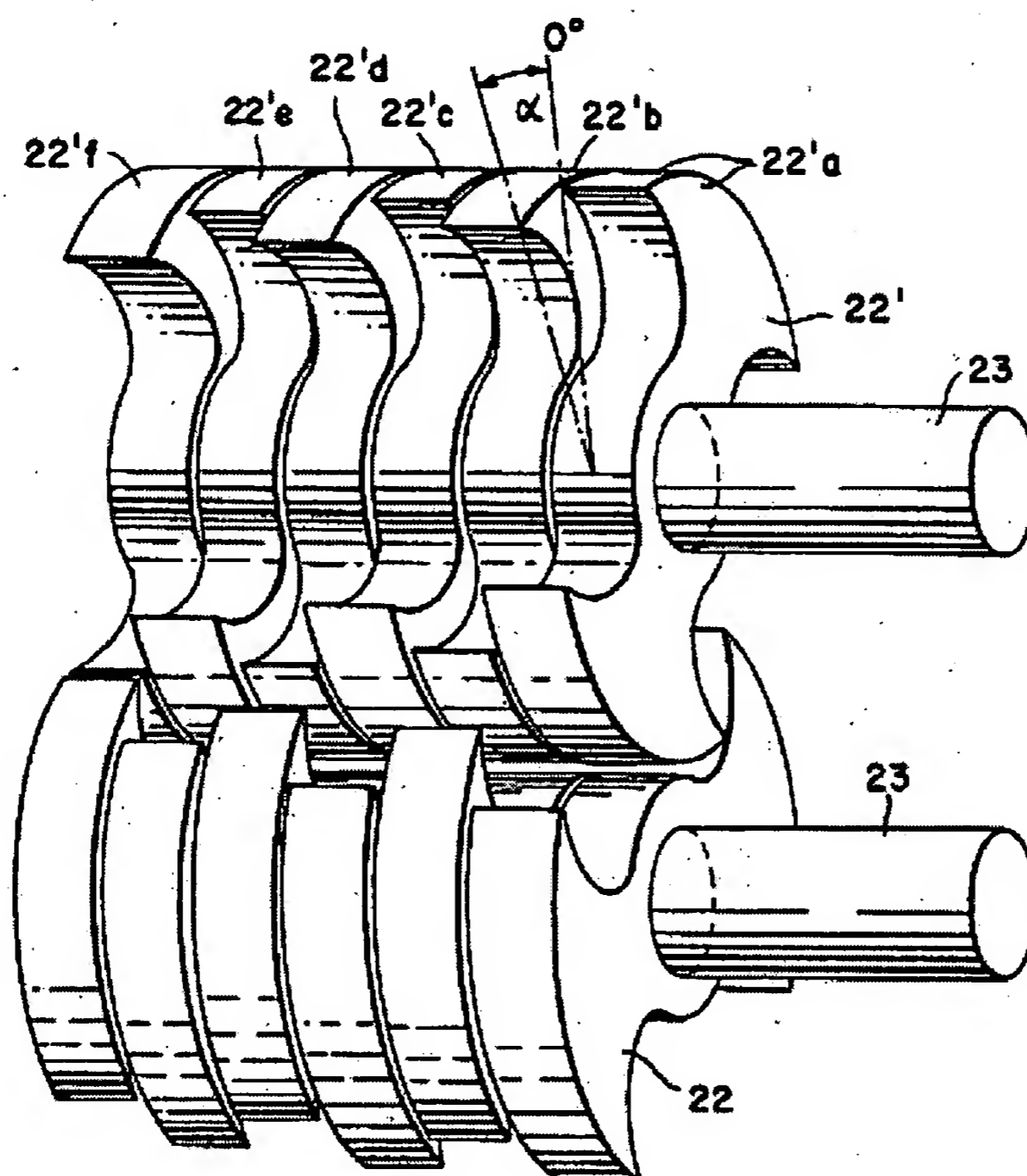
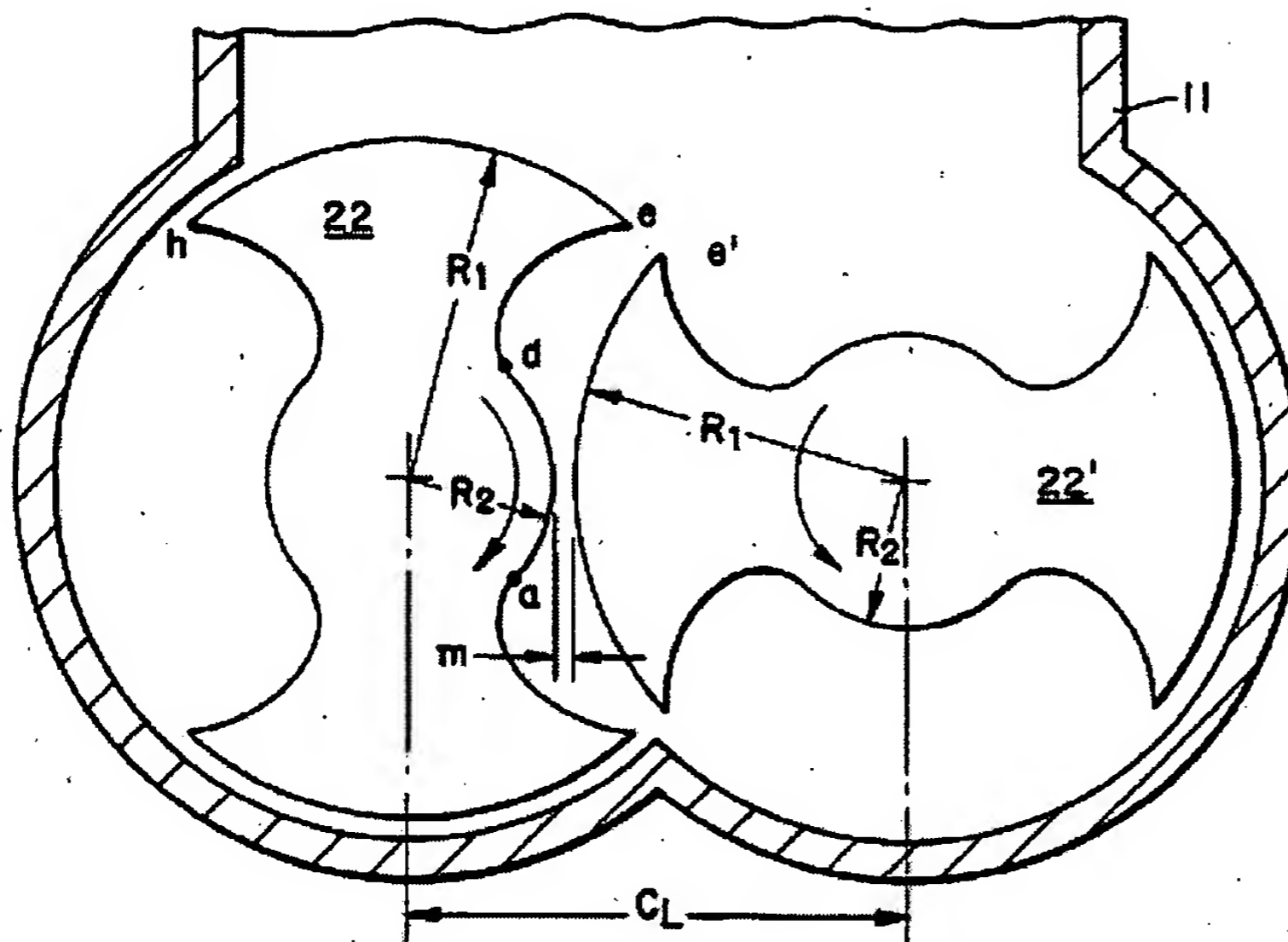


FIG. 3.



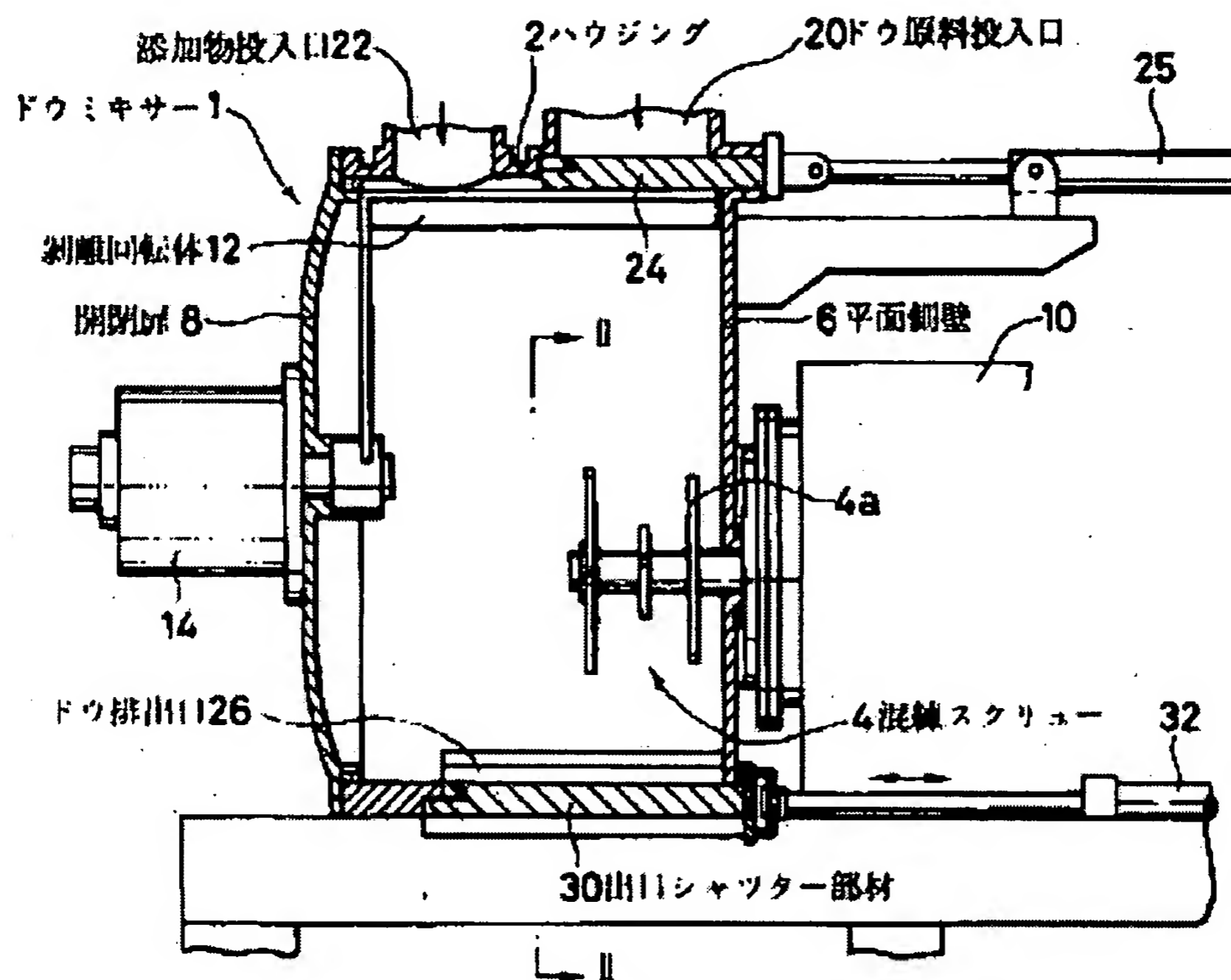
11. Claims 1, 2, 4, 5, 9, 10, 12, 13, 15, 16, 17, 18, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 6-90651.

JP 6-90651 discloses an element (one or more of members 4a) as seen in the Figures below comprising one or more lobes extending from a central portion adapted to receive a shaft; wherein the one or more lobes has an outer periphery ridge and first and second lateral sidewalls, wherein one of said lateral sidewalls of said at least one lobe is concave between said outer periphery ridge and said central portion (as seen in the Figures); wherein the other of said lateral sidewalls on each lobe is convex between said first outer periphery ridge and said central portion (as seen in the Figures); the element may comprise one or more of members 4a and thus includes two or three or

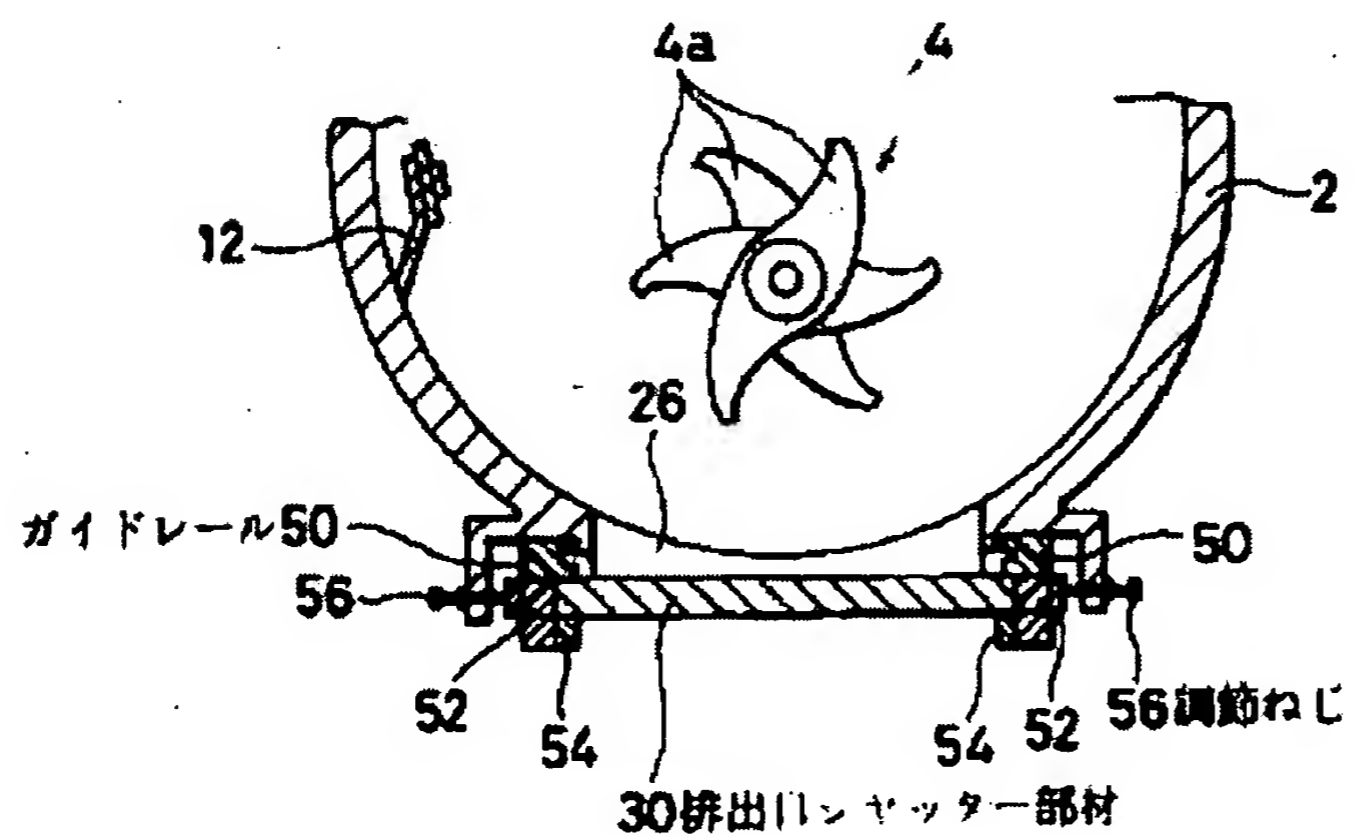
Art Unit: 1723

more lobes as seen in Figs. 1-2; the element constituting a block comprising a plurality of elements (multiple members 4a), wherein the block includes at least two kneading elements 4a wherein one of the lateral sidewalls on at least one lobe is concave between said outer periphery ridge and said central portion; wherein the block comprises N number of kneading elements 4a adjacent to each other (e.g., N number of 4a - Fig. 2), wherein all the elements have at least one lobe having first and second lateral sidewalls and wherein one of the lateral sidewalls on said at least one lobe is concave between said outer periphery ridge and said central portion; wherein at least the first element (an upstream member 4a) of the block has at least one lobe having first and second lateral sidewalls and wherein one of the lateral sidewalls on said at least one lobe is concave between said outer periphery ridge and said central portion; wherein at least the last element (a downstream member 4a) of the block has at least one lobe having first and second lateral sidewalls and wherein one of the lateral sidewalls on said at least one lobe is concave between said outer periphery ridge and said central portion; wherein at least the first and last elements (an upstream member 4a and a downstream member 4a) of the block has at least one lobe having first and second lateral sidewalls and wherein one of the lateral sidewalls on said at least one lobe is concave between said outer periphery ridge and said central portion; wherein the other of said lateral sidewalls on each lobe in the block is convex between said first outer periphery ridge and said central portion (as seen in the Figures).

【~~図~~1】



【図2】



Art Unit: 1723

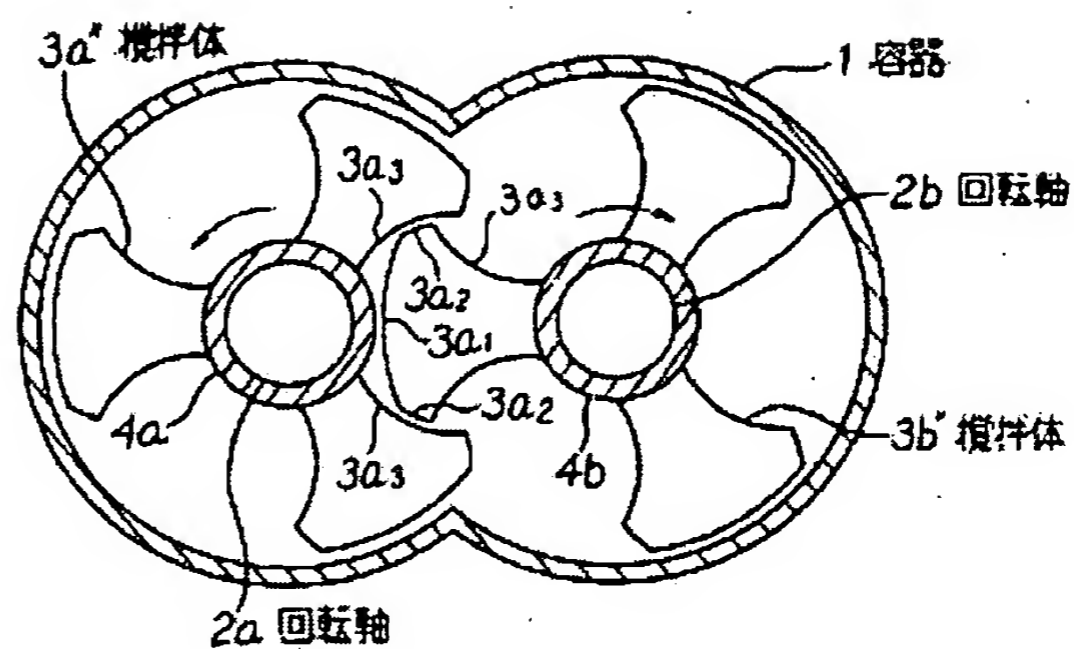
12. Claims 1, 3, 4, 5, 9, 11, 12, 13, 15, 16, 17, 18, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 4-104827.

JP 4-104827 discloses an element (one or more of members 3a or 3b) as seen in the Figures below comprising one or more lobes extending from a central portion adapted to receive a shaft 2a or 2b; wherein the one or more lobes has an outer periphery ridge and first and second lateral sidewalls, wherein one of said lateral sidewalls of said at least one lobe is concave between said outer periphery ridge and said central portion (as seen in the Figures); wherein the other of said lateral sidewalls on each lobe is concave between said first outer periphery ridge and said central portion (as seen in the Figures); the element may comprise one or more of members 3a or 3b and includes two or three or more lobes as seen in Figs. 1-3; the element constituting a block comprising a plurality of elements (multiple members 3a or 3b), wherein the block includes at least two kneading elements 3a or 3b wherein one of the lateral sidewalls on at least one lobe is concave between said outer periphery ridge and said central portion; wherein the block comprises N number of kneading elements 3a or 3b adjacent to each other (e.g., N number of 3a or 3b - Fig. 1), wherein all the elements have at least one lobe having first and second lateral sidewalls and wherein one of the lateral sidewalls on said at least one lobe is concave between said outer periphery ridge and said central portion; wherein at least the first element (an upstream member 3a or 3b) of the block has at least one lobe having first and second lateral sidewalls and wherein one of the lateral sidewalls on said at least one lobe is concave between said outer periphery ridge and said central portion; wherein at least the last

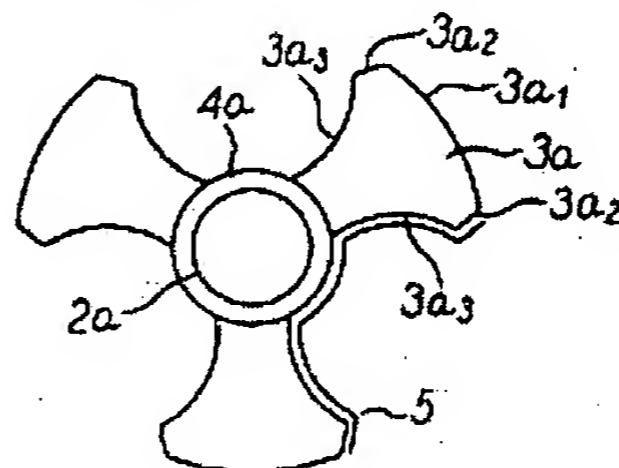
Art Unit: 1723

element (a downstream member 3a or 3b) of the block has at least one lobe having first and second lateral sidewalls and wherein one of the lateral sidewalls on said at least one lobe is concave between said outer periphery ridge and said central portion; wherein at least the first and last elements (an upstream member 3a or 3b and a downstream member 3a or 3b) of the block has at least one lobe having first and second lateral sidewalls and wherein one of the lateral sidewalls on said at least one lobe is concave between said outer periphery ridge and said central portion; wherein the other of said lateral sidewalls on each lobe in the block is concave between said first outer periphery ridge and said central portion (as seen in the Figures).

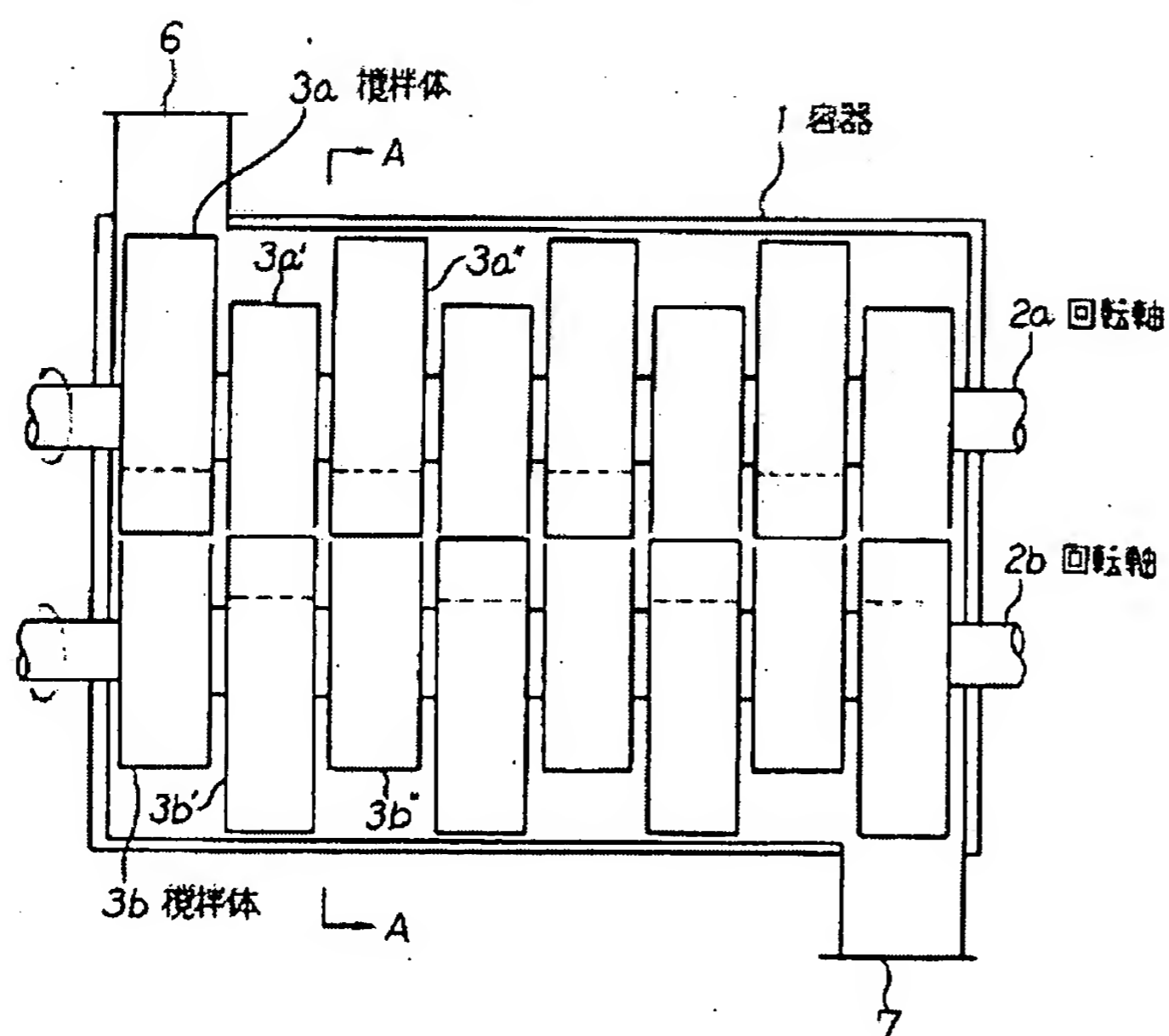
第 2 図



第 3 図



第 1 図



Art Unit: 1723

Allowable Subject Matter

13. Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

The prior art of record does not teach or fairly suggest three kneading elements wherein the first and last kneading elements are twisted in a first direction and wherein the other elements are twisted in an opposite direction.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited prior art discloses kneading elements and kneading block arrangements.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Cooley whose telephone number is (571) 272-1139. The examiner can normally be reached on Mon-Fri. All official facsimiles should be transmitted to the centralized fax receiving number 571-273-8300.

Art Unit: 1723

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Charles" followed by a stylized flourish.

Charles E. Cooley
Primary Examiner
Art Unit 1723

16 February 2006